

EXHIBIT 4

1 UNITED STATES DISTRICT COURT
2 FOR THE EASTERN DISTRICT OF TENNESSEE
3 GREENEVILLE DIVISION

4 - - - - - :
5 :
6 ULTIMA SERVICES CORPORATION, :
7 :
8 Plaintiff, : CASE NO.
9 :
10 vs. : 2:20-cv-00041
11 :
12 U.S. DEPARTMENT OF :
13 AGRICULTURE, et al., :
14 :
15 Defendants. :
16 :
17 - - - - - :

18 DEPOSITION OF JONATHAN GURYAN

19 DATE: April 27, 2022
20 TIME: 9:30 a.m.
21 LOCATION: Via Zoom Videoconference
22 REPORTED BY: Constance H. Rhodes
Reporter, Notary

Job No. CS5185100

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<p>1 case in which in your opinions have been, I would</p> <p>2 say, excluded or stricken or limited by the court?</p> <p>3 A Yes.</p> <p>4 Q Have you ever been an expert in a case</p> <p>5 involving the Small Business Administration's 8(a)</p> <p>6 business development?</p> <p>7 A I believe so.</p> <p>8 Q Are you familiar with the Small Business</p> <p>9 Administration's 8(a) business development</p> <p>10 program?</p> <p>11 A I have made myself familiar with it over</p> <p>12 the course of working on this case.</p> <p>13 Q What did you do to become familiar with</p> <p>14 it while working on the case?</p> <p>15 A Well, I had conversations with counsel,</p> <p>16 and then I also reviewed information on the web on</p> <p>17 the -- about the -- that described the rules of</p> <p>18 the program. And then I read the filings in this</p> <p>19 case.</p> <p>20 Q Which filings in the case have you read?</p> <p>21 A I read a copy of the complaint and then</p> <p>22 I've also -- maybe this is not a filing, but I've</p>	<p>1 the contracting right, but they contract with the</p> <p>2 Small Business Administration and designate some</p> <p>3 contracts to be 8(a) contracts that would give</p> <p>4 preferences to small businesses that are deemed to</p> <p>5 be 8(a) eligible to win those contracts.</p> <p>6 My understanding is that there are certain</p> <p>7 groups of businesses that become eligible, are</p> <p>8 presumed eligible, and then other -- but there are</p> <p>9 other ways to become eligible to participate in the</p> <p>10 8(a) program.</p> <p>11 Q Do you have any opinions about the 8(a)</p> <p>12 program?</p> <p>13 MR. ROSMAN: Objection to the form of the</p> <p>14 question. You may answer.</p> <p>15 THE WITNESS: Are you asking if I am</p> <p>16 offering an opinion as an expert in this case about</p> <p>17 the 8(a) program?</p> <p>18 BY MS. DINAN:</p> <p>19 Q Sure. Let's go with that.</p> <p>20 A I'm -- I don't -- I'm not offering any</p> <p>21 opinions on any legal matters because I'm not a</p> <p>22 legal expert, and I'm -- I'm not -- I don't plan</p>
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<p>1 read descriptions of it in other expert reports.</p> <p>2 Q The other experts in this case?</p> <p>3 A Yes.</p> <p>4 Q You said you read materials on the web.</p> <p>5 Do you recall what those websites were?</p> <p>6 A I don't think I could tell you the --</p> <p>7 like the web address, but they were -- I believe</p> <p>8 they were websites, government websites, from the</p> <p>9 Small Business Administration that describe the</p> <p>10 8(a) program and the process of different ways to</p> <p>11 become, you know, registered for the 8(a) program</p> <p>12 and the rules.</p> <p>13 Q So what is your understanding of the</p> <p>14 8(a) program?</p> <p>15 A My understanding of the 8(a) program is</p> <p>16 that it's a program that is intended to increase</p> <p>17 the share of government contracting dollars that</p> <p>18 go to small businesses, in particular small</p> <p>19 businesses that are economically disadvantaged --</p> <p>20 economically and socially disadvantaged, I</p> <p>21 believe; that the different government agencies</p> <p>22 can -- I'm not sure I'll get the exact details of</p>	<p>1 to offer any opinion about the 8(a) program other</p> <p>2 than to the extent that it informs the opinions</p> <p>3 that I've laid out in my report.</p> <p>4 Q I understand you are not offering an</p> <p>5 expert about the 8(a) program. Do you have any</p> <p>6 personal opinions about the 8(a) program?</p> <p>7 A None that I intend to offer in this</p> <p>8 case.</p> <p>9 Q Okay. When were you first contacted by</p> <p>10 the plaintiff about getting involved in this case?</p> <p>11 A I believe it was either January or</p> <p>12 February of this year.</p> <p>13 Q Of 2022?</p> <p>14 A Yes.</p> <p>15 Q And what were you asked to do?</p> <p>16 A I was told there would be expert reports</p> <p>17 filed by defense, and I was asked to review those</p> <p>18 expert reports and to provide my opinion of the</p> <p>19 methods used in those reports and of the</p> <p>20 conclusions that those -- and opinions that those</p> <p>21 experts offered.</p> <p>22 Q Were you contacted before or after</p>

<p style="text-align: right;">Page 38</p> <p>1 Q You indicate that the existence of</p> <p>2 disparities in a particular market -- here I'm</p> <p>3 reading from page 8 again -- could have been</p> <p>4 caused by nondiscriminatory factors, by</p> <p>5 discrimination that exists outside of that market</p> <p>6 and discrimination that exists in markets that</p> <p>7 affect participants prior to the market in</p> <p>8 question, by discrimination by participants in the</p> <p>9 market in question or other factors.</p> <p>10 What do you mean in that paragraph, "by</p> <p>11 discrimination that exists outside the market"?</p> <p>12 A Just to clarify, just to make sure the</p> <p>13 record is clear, I think you skipped a few words</p> <p>14 in reading that, so I just want to make sure that</p> <p>15 if we're quoting from that sentence we use the</p> <p>16 actual sentence in the report.</p> <p>17 But you are asking about the phrase "by</p> <p>18 discrimination that exists outside of that market?"</p> <p>19 Q Yes.</p> <p>20 A What I mean is that if the purpose or if</p> <p>21 the intention of a test, a statistical test, is to</p> <p>22 measure discrimination in a particular market,</p>	<p style="text-align: right;">Page 40</p> <p>1 Q Is it your understanding that the only</p> <p>2 relevant question in this case is whether</p> <p>3 disparities in a particular market, specifically</p> <p>4 the market that the plaintiff ultimately operates</p> <p>5 in, have been caused by discrimination in that</p> <p>6 market?</p> <p>7 A I'm not offering an opinion one way or</p> <p>8 the about whether that is the relevant question.</p> <p>9 What I'm offering is, based on my expertise as an</p> <p>10 economist who studies discrimination, that the</p> <p>11 analyses that Dr. Wainwright and Mr. Chow did,</p> <p>12 they do not answer the question of whether</p> <p>13 discrimination in a particular market caused a</p> <p>14 disparity that they measure. Whether that is the</p> <p>15 relevant legal question is not something that I'm</p> <p>16 opining.</p> <p>17 Q But you don't have an opinion as to what</p> <p>18 the relevant market is, correct?</p> <p>19 A Again, when you say "relevant" if what</p> <p>20 you mean by relevant is relevant in a legal sense,</p> <p>21 I'm not offering an opinion about a legal question</p> <p>22 like that.</p>
<p style="text-align: right;">Page 39</p> <p>1 then you have to assess whether -- and you find a</p> <p>2 disparity in that market, then you have to assess</p> <p>3 whether that disparity was caused by factors other</p> <p>4 than discrimination in that market.</p> <p>5 Some of those factors could be</p> <p>6 nondiscriminatory factors, and some of those factors</p> <p>7 may be discrimination, but discrimination that</p> <p>8 exists in some other market that has effects on this</p> <p>9 market.</p> <p>10 Q Do you have an opinion as to what the</p> <p>11 relevant market is in this case?</p> <p>12 A So that is a legal question that I do</p> <p>13 not have an opinion on. I -- so no, though I am</p> <p>14 offering opinions that will -- you know, are</p> <p>15 described later in the report about the fact that</p> <p>16 some of the analyses that Dr. Wainwright and</p> <p>17 Mr. Chow do include information from industries</p> <p>18 that are different than the industry that the</p> <p>19 plaintiff operates in.</p> <p>20 But to be clear, I am not offering an</p> <p>21 opinion about -- in a legal sense -- what is the</p> <p>22 relevant market for the purposes of this case.</p>	<p style="text-align: right;">Page 41</p> <p>1 Q I'm not asking in a legal sense. I'm</p> <p>2 asking in the sense that you just described it.</p> <p>3 As you just said, I think, the question in this</p> <p>4 case is whether there is discrimination in a</p> <p>5 particular market. You think their analyses</p> <p>6 haven't answered that question.</p> <p>7 So as you've explained it, what do you</p> <p>8 consider to be the relevant market here?</p> <p>9 MR. ROSMAN: Objection to the form of the</p> <p>10 question. You may answer if you understand it.</p> <p>11 THE WITNESS: Again, I said a particular</p> <p>12 market. And what particular market or markets are</p> <p>13 the markets that are relevant to the legal questions</p> <p>14 in this case is not something that I am offering an</p> <p>15 opinion on.</p> <p>16 But what I am offering an opinion on is</p> <p>17 if there is a particular market or set of markets,</p> <p>18 that it is important, for the purpose of this</p> <p>19 case, for somebody to test for the presence of</p> <p>20 discrimination. I'm offering an opinion that in</p> <p>21 order to assess whether there is discrimination in</p> <p>22 any set of markets, you have to assess whether any</p>

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<p>1 in the rest of this study, which include audit</p> <p>2 studies, correspondence studies, natural</p> <p>3 experiments, field experiments. Those are methods</p> <p>4 that, you know, people have developed in different</p> <p>5 contexts to try to measure whether treatment is</p> <p>6 different of, for instance, workers who are equally</p> <p>7 productive or would be equally productive but happen</p> <p>8 to be of a different race or a different gender.</p> <p>9 Q Do you believe that discrimination</p> <p>10 requires proof of an individual's conscious</p> <p>11 intent?</p> <p>12 MR. ROSMAN: Objection to the form of the</p> <p>13 question. You may answer.</p> <p>14 THE WITNESS: So let me preface this by</p> <p>15 saying I'm not a legal expert. I'm not offering</p> <p>16 legal opinions. My understanding is that that</p> <p>17 question depends on the type of discrimination</p> <p>18 that's being claimed. So there certainly are</p> <p>19 situations in my nonexpert -- nonlegal expert</p> <p>20 understanding where it is possible to violate the</p> <p>21 law related to discrimination without someone having</p> <p>22 to show intent.</p>	<p>1 decision of pay on group membership, you could end</p> <p>2 up with differences in pay that would show up in</p> <p>3 regression. That's different from saying that it</p> <p>4 is necessary to draw an inference of an employer's</p> <p>5 intent to come to a conclusion about</p> <p>6 discrimination.</p> <p>7 Q Okay. Same footnote, it says: It could</p> <p>8 be the case that race or gender is correlated with</p> <p>9 other proxies for productivity that are</p> <p>10 unobservable to the researcher.</p> <p>11 Are you aware of any studies that show a</p> <p>12 correlation between race and productivity?</p> <p>13 A So for instance, average years of</p> <p>14 education are higher for -- for white people than</p> <p>15 black people on average. And years of education</p> <p>16 is correlated with productivity on average.</p> <p>17 That's not going to be true in every job. There</p> <p>18 are some jobs where education probably isn't</p> <p>19 correlated with productivity. There are others</p> <p>20 where it is. That's an example of something that</p> <p>21 might vary on average by race that is correlated</p> <p>22 with productivity. Again, on average.</p>
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<p>1 BY MS. DINAN:</p> <p>2 Q I understand this is just an example,</p> <p>3 but this example discusses hiring decisions. Do</p> <p>4 you believe it has any relevance to contracting?</p> <p>5 A Again, I'm going to be careful when you</p> <p>6 use the word relevant because relevant sounds like</p> <p>7 something you are asking me for an opinion about</p> <p>8 what's relevant in the legal sense.</p> <p>9 Q I am not. I assure you.</p> <p>10 A So then I'm not sure what you mean.</p> <p>11 Q I guess my question is, here the example</p> <p>12 is talking about how you would determine what's in</p> <p>13 the mind of an employer when making a hiring</p> <p>14 decision. How, for example, would you determine</p> <p>15 what's in the mind of a contractor when making</p> <p>16 decisions about whether or not to accept a bid?</p> <p>17 A No. That's -- again, I disagree with</p> <p>18 the premise of the question. Bertrand and Duflo</p> <p>19 are not saying that it is necessary to figure out</p> <p>20 what's in the mind of an employer to perform a</p> <p>21 proper test for discrimination. What they're</p> <p>22 saying is that even if employers never based their</p>	<p>1 It's also the case that the way, you know,</p> <p>2 public schools are funded in the United States and</p> <p>3 the fact that there is racial segregation in where</p> <p>4 people live contributes to the differences in the</p> <p>5 funding of schools that, on average, African</p> <p>6 American and white kids go to. And so differences</p> <p>7 in access to well funded education might generate</p> <p>8 differences in average productivity by the time</p> <p>9 people get to the labor market. An employer may not</p> <p>10 have very good information, and certainly a</p> <p>11 researcher may not have very good information on the</p> <p>12 level of funding in schools that people attended</p> <p>13 when they were kids.</p> <p>14 Q You listed two factors: Average years</p> <p>15 of education and school funding or access to</p> <p>16 education, which are not themselves -- which are</p> <p>17 separate factors that you can control for other</p> <p>18 than race itself, correct?</p> <p>19 A It depends on what information you have</p> <p>20 in a dataset. So you might have years of</p> <p>21 education in a dataset. That would be relatively</p> <p>22 common. It would be fairly uncommon in a dataset</p>

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<p>1 to answer. I can't answer that in the abstract</p> <p>2 without knowing what question I'm trying to answer</p> <p>3 and what data I have and what the setting is that</p> <p>4 I'm trying to answer the question in.</p> <p>5 Q Let's assume we're looking for</p> <p>6 disparities in contracting, the issue in this</p> <p>7 case, and you are trying to determine which</p> <p>8 variables to include. What types of information</p> <p>9 would you look at in making that judgment?</p> <p>10 MR. ROSMAN: Objection to the form of the</p> <p>11 question.</p> <p>12 THE WITNESS: Your question suggested that</p> <p>13 the goal is to measure disparities. Are you really</p> <p>14 asking whether we want to measure disparities, or</p> <p>15 are we trying to measure discrimination?</p> <p>16 BY MS. DINAN:</p> <p>17 Q I'm trying to get at your thinking</p> <p>18 process. You, as an economist, are -- are, you</p> <p>19 know, trying to put together a study of regression</p> <p>20 analysis and determine which variables to include</p> <p>21 in that regression analysis. What would you do to</p> <p>22 make those decisions?</p>	<p>1 to include?</p> <p>2 MR. ROSMAN: I'm going to object to the</p> <p>3 question again. Go ahead.</p> <p>4 THE WITNESS: I disagree with the premise.</p> <p>5 I'm not willing to agree that I would try to run a</p> <p>6 regression to try to answer that question.</p> <p>7 BY MS. DINAN:</p> <p>8 Q Is it your opinion that if you are not</p> <p>9 able to control for every possible variable that</p> <p>10 might cause the average outcomes of two groups to</p> <p>11 be different that you have failed to do a proper</p> <p>12 regression analysis?</p> <p>13 A Whether the regression analysis is</p> <p>14 proper or not depends on what question you are</p> <p>15 trying to answer. If you are trying to answer a</p> <p>16 question of whether discrimination is present in a</p> <p>17 particular market, then in order to do that using</p> <p>18 a regression analysis, you need to be able to rule</p> <p>19 out that any disparity that you measure may have</p> <p>20 been caused by nondiscriminatory factors or by</p> <p>21 factors in other markets that you are not trying</p> <p>22 to test for discrimination in. If the regression</p>
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<p>1 A Well, the first thing I would do is I</p> <p>2 would determine what question I'm trying to</p> <p>3 answer, which you haven't specified. So what</p> <p>4 variables I put into a regression would depend on</p> <p>5 what question I was trying to answer. I also</p> <p>6 don't agree with the premise that I would even be</p> <p>7 running a regression to try to answer this</p> <p>8 question. It would depend on what question I was</p> <p>9 trying to answer.</p> <p>10 One of my opinions is that there's some</p> <p>11 questions where it's unlikely that we will be able</p> <p>12 to answer them using a regression method that tries</p> <p>13 to hold things constant as opposed to some other</p> <p>14 method.</p> <p>15 Q I understand that you think regression</p> <p>16 is inappropriate for this. But let's take an</p> <p>17 example. Again, this case. I will be more</p> <p>18 precise. You're not looking at measuring</p> <p>19 disparities, but you're looking to measure whether</p> <p>20 there is discrimination in contracting outcomes.</p> <p>21 And you are looking to run a regression to do</p> <p>22 that. How would you think about which variables</p>	<p>1 analysis can't do that, then it can't answer the</p> <p>2 question.</p> <p>3 Q If a regression analysis can't do that,</p> <p>4 as you said, do you think there's any value in a</p> <p>5 regression analysis at all?</p> <p>6 A Whether there is value is basically</p> <p>7 asking whether it can answer some other question</p> <p>8 and whether the answer to some other question is</p> <p>9 valuable in the context of this case is not for me</p> <p>10 to decide.</p> <p>11 I don't have an opinion about what</p> <p>12 questions should be answered by -- you know, that</p> <p>13 would be relevant for legal proceedings. I'm just</p> <p>14 saying that if the purpose of a statistical analysis</p> <p>15 is to test for discrimination in a market, you must</p> <p>16 be able to rule out nondiscriminatory factors or</p> <p>17 discrimination in other markets that had the</p> <p>18 potential to cause the disparity. And if you can't</p> <p>19 do that, then you are not able to use that</p> <p>20 regression analysis to answer the question of</p> <p>21 whether there's discrimination in that market.</p> <p>22 Q You've indicated in your own research,</p>